

Listing of Claims:

1. (previously presented) An extruded polymeric article comprised of a polymeric matrix and polymeric particles which are substantially spherical, highly crosslinked, have a mean particle size of between 35 to 60 micrometers and have a particle size distribution between 10-110 micrometers wherein the article has:

- a) a Haze number as determined by ASTM D103 of at least 90%,
- b) an opacity as determined by ASTM D20805-80 of at least 10%,
- c) a minimum surface roughness of 0.5 um to 30 um as measured using ASTM methods B46.11 B361.2 and Y14.36; and

d) a Total White Light Transmission of greater than 78.9% as determined by a Hunterlab colorimeter_D25 model using ASTM E1331 and ASTM E1163, wherein said determinations are made using an 0.125 inch thick extruded sheet comprised of the polymeric matrix and polymeric particles.

2. (Cancelled)

3. (original) The article of Claim 1 wherein the polymeric matrix is an ABS terpolymer, ASA copolymer, polycarbonate, polyester, PETG, MBS copolymer, HIPS, acrylonitrile/acrylate copolymer, polystyrene, SAN, MMA/S, an acrylonitrile/methyl methacrylate copolymer, impact modified polyolefins, PVC, impact modified PVC, imidized acrylic polymer, acrylic polymer or impact modified acrylic polymer.

4. (previously presented) The article of Claim 3 wherein the polymeric matrix is comprised of polymethyl methacrylate.

5. (original) The article of Claim 1 wherein a frosted appearance is achieved through the mismatch of the refractive indices of the polymeric particles and polymeric matrix by greater than 0.02.

6. (previously presented) The article of Claim 1 comprised of

a) 20 - 90% by weight, polymethyl methacrylate or alkyl methacrylate/alkyl acrylate copolymer matrix;

b) 0 - 50% by weight, modifiers; and

c) 5 - 60% by weight, highly crosslinked spherical polymeric particles comprised of about 0-100 % by weight, styrene; 0-100% by weight, alkyl methacrylate, 0-100% by weight, alkyl acrylate and crosslinking agent.

7. (cancelled)

8. (previously presented) The article of Claim 1 comprised of:

a) 20 - 90% by weight, polymethyl methacrylate matrix;

b) 0 - 50% by weight, modifiers; and

c) 5 - 60% by weight, highly crosslinked spherical polymeric particles comprised of 0 - 50% by weight, styrene 99.9 - 50% by weight, alkyl alkylacrylate, alkyl acrylate or a combination thereof; and 0.1- 2.5% by weight, crosslinking agent.

9. (previously presented) The article of Claim 1, wherein the particles are comprised of:

a) 0 - 50% by weight, styrene;

b) 45- 99.01% by weight, alkyl methacrylate or alkyl acrylate;

c) 0.01-5% by weight, crosslinking agent.

10. (original) The article of Claim 9 wherein the crosslinking agent is ethylene glycol dimethacrylate, divinylbenzene or allyl methacrylate.

11. (original) The article of Claim 10 wherein the crosslinking agent is divinylbenzene.

12. (previously presented) A resin comprised of:

a) 20 - 90% by weight, matrix comprised of polymethyl methacrylate;

b) 5 - 50% by weight, modifiers; and

c) 5 – 60% by weight, highly crosslinked spherical polymeric particles comprised of 10- 50% by weight, styrene 90 - 50% by weight, methyl methacrylate, 0.1 - 2.5% by weight, crosslinking agent, wherein the polymeric particles have a mean particle size of 35-60 micrometers, and a particle size distribution of between 15-110 micrometers, wherein if the resin is extruded into a 0.125 inch thick sheet, the sheet has a Haze number as determined by ASTM D103 of at least 90%, an opacity as determined by ASTM D20805-80 of at least 10%, a minimum surface roughness of 0.5 um to 30 um as measured using ASTM methods B46.11 B361.2 and Y14.36 and a Total White Light Transmission of greater than 78.9% measured by a Hunterlab colorimeter_D25 model using ASTM E1331 and ASTM E1163.

13. (original) The resin of Claim 12 wherein the crosslinking agent is ethylene glycol dimethacrylate, divinylbenzene or allyl methacrylate.

14. (original) The resin of Claim 12 wherein the crosslinking agent is allylmethacrylate.

15. (previously presented) The resin of Claim 12 wherein the polymeric particles contain a colorant.

16. (previously presented) A resin comprised of:

a) 60 - 85% by weight, matrix comprised of polymethyl methacrylate; and

b) 15 – 40% by weight, highly crosslinked spherical polymeric particles comprised of:

15 - 35% by weight, styrene

65 - 85% by weight, methyl methacrylate 0.5-1.5% by weight, allyl methacrylate;

wherein the polymeric particles have a mean particle size of 25-55 micrometers, and a particle size distribution of between 15-110 micrometers, and wherein if the resin is extruded into a 0.125 inch thick sheet, the sheet has a Haze number as determined by ASTM D103 of at least 90%, an opacity as determined by ASTM D20805-80 would be at least 10%, a minimum surface roughness of 0.5 um to 30 um as measured using

ASTM methods B46.11 B361.2 and Y14.36 and a Total White Light Transmission of greater than 78.9% measured by a Hunterlab colorimeter_D25 model using ASTM E1331 and ASTM E1163.

17. (previously presented) A resin comprised of:

a) 20 - 90% by weight, matrix comprised of polymethyl methacrylate or alkyl methylacrylate/alkyl acrylate copolymer;

b) 0 - 50% by weight, modifiers; and

c) 5 - 40% by weight, highly crosslinked spherical polymeric particles comprised of about 0-100% by weight, styrene, 0-100% by weight, alkyl methacrylate, 0-100% by weight, alkyl acrylate and crosslinking agent wherein the polymeric particles have a mean particle size of 25-55 micrometers, and a particle size distribution of between 15-110 micrometers, and wherein if the resin is extruded into a 0.125 inch thick sheet, the sheet has a Haze number as determined by ASTM D103 of at least 90%; an opacity as determined by ASTM D20805-80 would be at least 10%, a minimum surface roughness of 0.5 um to 30 um as measured using ASTM methods B46.11 B361.2 and Y14.36 and a Total White Light Transmission of greater than 78.9% measured by a Hunterlab colorimeter_D25 model using ASTM E1331 and ASTM E1163.